

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An interface system for a personal computer comprising an array of data input keys having multi- character indicia, said interface system further comprising: data storage means; data processing means; and data display means, wherein the data processing means is adapted to facilitate a reduction in the number of key presses required to create a given data string to less than the number of characters within said data string by:

- (i) filtering data stored within the data storage means by initial character, as determined by the character or characters ascribed to a data input key initially pressed by a user;
- (ii) prioritising said filtered data in real- time according to user-configurable prioritisation parameters; and
- (iii) displaying one or more prioritised data strings on the data display means for subsequent selection by the user;

wherein the data storage means is defined by one or more data dictionaries each holding probability information relating to a given data string's historical usage and relationship with other data strings, the probability information being based on statistical derivatives of language and user traits;

the probability information being context ratios determining the likelihood of a given data string being grouped with more than one other data string to determine the context of a longer data string.

2. (Original) An interface system according to claim 1, wherein successive key presses act to filter further the number of data strings displayed on the data display means for subsequent selection by the user.

3. (Previously presented) An interface system according to claim 1, wherein the data input

keys within the array have multi-character indicia which are selected to accord with a statistical extrapolation of the most used alphanumeric character combinations in a given language, to thus facilitate a further reduction in the number of key presses required to create a given data string.

4. (Original) An interface system according to claim 1, wherein the data input keys having multicharacter indicia are composite keys having at least primary and secondary indicia corresponding to primary and secondary key-values or key-functions.

5. (Original) An interface system according to claim 1, wherein the data storage means is defined by one or more data dictionaries in which qualitative and/or quantitative information is stored in relation to each data string.

6. (Original) An interface system according to claim 5, wherein a configuration means is provided to allow a user to selectively enable or disable physical interactivity reduction characteristics of the interface system which facilitate a further reduction in the number of key presses required to create a given data string.

7. (Currently amended) An interface system according to claim 6, wherein the physical interactivity reduction characteristics are selectable from the group comprising:

- (i) entering a space after selection of a data string;
- (ii) limitation of displayed data strings to those having a total number of characters greater than the a number of key presses;
- (iii) expanding typed or selected mnemonics, abbreviations or acronyms into their corresponding full data strings;
- (iv) performing two-way translations between data strings and user-configurable dictionary definitions or descriptions;
- (v) enabling the selection of a secondary key- value or key-function by means of double- pressing a data input key;

(vi) enabling the selection from a list of different data strings stored within the data storage means by means of double- pressing a data input key, said data string having an initial letter or letters corresponding to the key-value of that key; and

(vii) enabling the right-to-left and/or left-to- right deletion of n characters, words, sentences or paragraphs by means of a single key press.

8. (Previously presented) An interface system according to claim 7, wherein the secondary key-value or key-function obtained by double pressing a data input key is identical with a SHIFT value of that key.

9. (Previously presented) An interface system according to claim 7, wherein each double-press must be completed within a predetermined period of time in order to select the secondary key-value or key-function.

10. (Previously presented) An interface system according to claim 7, wherein the secondary key-value corresponds to the secondary indicia of a composite key having multi-character indicia.

11. (Previously presented) An interface system according to claim 7, wherein the secondary key-value corresponds to a capitalised conventional key-value.

12. (Previously presented) An interface system according to claim 7, wherein there is provided at least one function key operable in combination with a composite key and adapted to access the secondary key-value or key-function.

13. (Previously presented) An interface system according to claim 7, wherein the data strings selectable from the list are actively prioritised within the data storage means according to user-definable quantitative and/or qualitative information.

14. (Previously presented) An interface system according to claim 7, wherein, the ability to select a different data string from the list is disabled upon pressing of a SPACE key, or another non-character key.
15. (Previously presented) An interface system according to claim 6, wherein the configuration means also allows a user to selectively adjust the prioritisation parameters according to the desired qualitative and/or quantitative characteristics of the data stored within the, or each, data dictionary.
16. (Original) An interface system according to claim 15, wherein the qualitative and/or quantitative information comprises statistical and/or probability information relating to each data string stored within the data storage means.
17. (Previously presented) An interface system according to claim 15, wherein all qualitative and quantitative information is dynamically updated in real-time.
18. (Previously presented) An interface system according to claim 15, wherein the data processing means maintains lookup chains between two or more data dictionaries such that a given data string in a first data dictionary is mapped to a data string or strings in one or more other data dictionaries for selection by the user.
19. (Original) An interface system according to claim 18, wherein where a given data string in a first data dictionary is mapped to a plurality of data strings in one or more other data dictionaries, said data strings are prioritised via the configuration means for ease of selection by the user.
20. (Previously presented) An interface system according to claim 18, wherein the mapping is performed dynamically.

21. (Original) An interface system according to claim 20, wherein the data processing means can selectively bypass or reset the dynamically updated qualitative and quantitative information.

22. (Previously presented) An interface system according to claim 15, wherein the data processing means maintains associative links between any given data string and up to n other data strings to thus display or project the most relevant longer data string comprised of n+1 data strings for selection by the user.

23. (Original) An interface system according to claim 22, wherein a plurality of the most relevant longer data strings are made available or displayed in a prioritised list for selection by the user.

24. (Previously presented) An interface system according to claim 22, wherein selection of a longer data string induces a repetition of associative linking such that a further one or more relevant longer data strings are displayed for selection by the user.

25. (Previously presented) An interface system according to claim 23, wherein the relevance/prioritisation of the, or each, longer data string is determined according to statistical and/or probability information stored within the, or each, data dictionary.

26. (Original) An interface system according to claim 25, wherein statistical information relates to the historical inputting and/or selection of data strings.

27. (Original) An interface system according to claim 26, wherein the historical inputting and/or selection information can be one or more of the following: (i) frequency of inputting; (ii) frequency of selection (iii) character length; (iv) lexical pattern density; and (v) chronological weighting.

28. (Currently amended) An interface system according to claim 25, wherein probability information comprises ~~can be one or more of the following:~~ (i) occurrence and/or association ratios of two or more data strings within a longer data string; ~~(ii) context ratios determining the likelihood of a given data string being grouped with one or more other data strings to determine the context of a longer data string.~~

29. (Previously presented) An interface system according to claim 23, wherein the one or more data strings displayed on the data display means for subsequent selection by the user are displayed in list format in descending order of priority.

30. (Previously presented) An interface system according to claim 5, wherein synchronisation of data dictionaries between two or more personal computers can be accomplished by means of wired or wireless connectivity.

31. (Previously presented) An interface system according to claim 5, wherein synchronisation of data dictionaries between two or more personal computers can be accomplished by means of downloading from a common database.

32. (Previously presented) An interface system according to claim 5, wherein the, or each, data dictionary is manually populated.

33. (Previously presented) An interface system according to claim 5, wherein the population of the, or each, data dictionary with data and its corresponding qualitative and/or quantitative information may be accelerated by uploading onto the data storage means data strings resident on a personal computer or a remotely connected device.

34. (Previously presented) An interface system according to claim 5, wherein the dictionaries are populated by optically scanning external data strings by means of scanning apparatus.

35. – 58. (Withdrawn)